

Ghashghaee 09/729,332

=> d his

(FILE 'REGISTRY' ENTERED AT 09:56:01 ON 21 JUN 2001)

DEL HIS Y
ACT FARBA2/A

L1 STR
L2 4 SEA FILE=REGISTRY SSS FUL L1

FILE 'HCAPLUS' ENTERED AT 09:58:22 ON 21 JUN 2001

L3 3 S L2

=> fil reg

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STRUCTURE FILE UPDATES: 19 JUN 2001 HIGHEST RN 342573-24-4
 DICTIONARY FILE UPDATES: 19 JUN 2001 HIGHEST RN 342573-24-4

TSCA INFORMATION NOW CURRENT THROUGH January 11, 2001

Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

Structure search limits have been increased. See HELP SLIMIT
 for details.

=> d que stat l2

```

L1          STR
              17      18
              CH2     CH2
              |       |
HO---B~OH    CH2-N---Ak---N---CH2
20 10 19      12 13 14 15 16

```

NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
 L2 4 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 725 ITERATIONS
 SEARCH TIME: 00.00.01

4 ANSWERS

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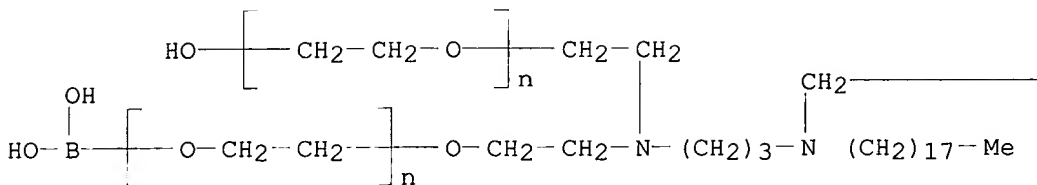
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L2  ANSWER 1 OF 4  REGISTRY  COPYRIGHT 2001 ACS
RN  172650-84-9  REGISTRY
CN  Poly(oxy-1,2-ethanediyl), .alpha.-borono-.omega.-[2-[(2-hydroxyethyl)[3-
    [[(2-hydroxyethyl)octadecyl]amino]propyl]amino]ethoxy]-, ether with
    .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (1:2) (9CI) (CA
    INDEX NAME)
MF  (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C27 H59 B N2 O5
CI  PMS
PCT Polyether

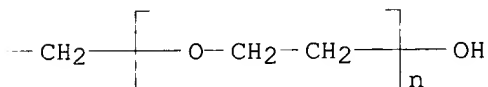
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SR CA
LC STN Files: CA, CAPLUS

PAGE 1-A



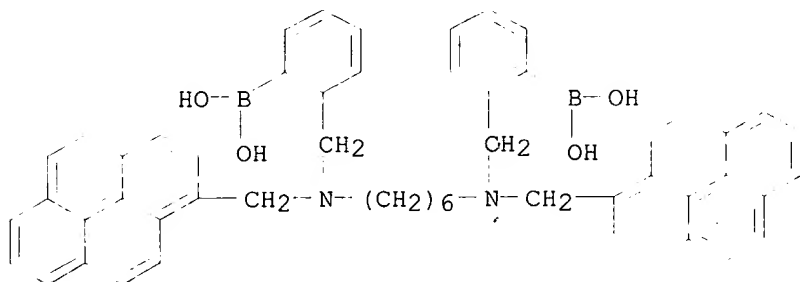
PAGE 1-B



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:121818

L2 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2001 ACS
RN 170454-33-8 REGISTRY
CN Boronic acid, [1,6-hexanediylbis[[1-(pyrenylmethyl)imino]methylene-2,1-phenylene]]bis- (9CI) (CA INDEX NAME)
MF C54 H50 B2 N2 O4
SR CA
LC STN Files: CA, CAPLUS



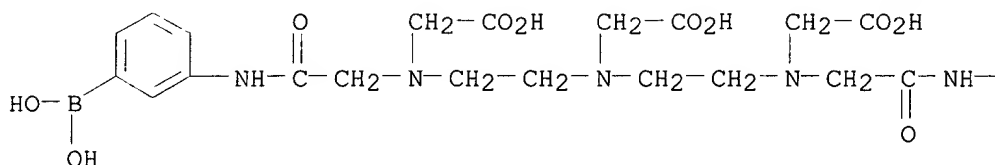
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 123:328796

L2 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2001 ACS
RN 146892-94-6 REGISTRY
CN Glycine, N,N-bis[2-[[2-[(3-boronophenyl)amino]-2-

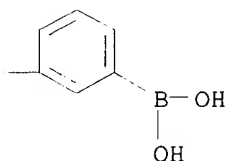
oxoethyl](carboxymethyl)amino]ethyl]-, tripotassium salt (9CI) (CA INDEX NAME)
 MF C26 H35 B2 N5 O12 . 3 K
 SR CA
 LC STN Files: CA, CAPLUS

PAGE 1-A



● 3 K

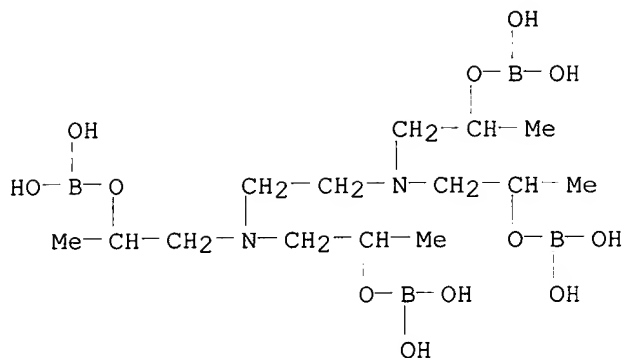
PAGE 1-B



1 REFERENCES IN FILE CA (1967 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 118:224354

L2 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2001 ACS
 RN 63938-89-6 REGISTRY
 CN 2-Propanol, 1,1',1'',1'''-(1,2-ethanediyldinitrilo)tetrakis-, ester with boric acid (H3BO3) (1:4) (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 2-Propanol, 1,1', 1'', 1'''-(ethylenedinitrilo)tetra-, tetrakis(borate) (7CI)
 MF C14 H36 B4 N2 O12
 LC STN Files: BEILSTEIN*, CAOLD, RTECS*
 (*File contains numerically searchable property data)



2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> fil hcaplus

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FILE COVERS 1947 - 21 Jun 2001 VOL 134 ISS 26
 FILE LAST UPDATED: 20 Jun 2001 (20010620/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

HCAPLUS now provides online access to patents and literature covered in CA from 1947 to the present. On April 22, 2001, bibliographic information and abstracts were added for over 2.2 million references published in CA from 1947 to 1966.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d his l3

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FILE 'HCAPLUS' ENTERED AT 09:58:22 ON 21 JUN 2001

L3

3 S L2

FILE 'REGISTRY' ENTERED AT 09:59:07 ON 21 JUN 2001

FILE 'HCAPLUS' ENTERED AT 09:59:21 ON 21 JUN 2001

=> d .ca hitstr 1-3

L3 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:947099 HCAPLUS

DOCUMENT NUMBER: 124:121818

TITLE: Lubricating oil additives and lubricating oil compositions for diesel engines

INVENTOR(S): Kita, Kazuo; Inaya, Shuichi

PATENT ASSIGNEE(S): Kao Corp, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

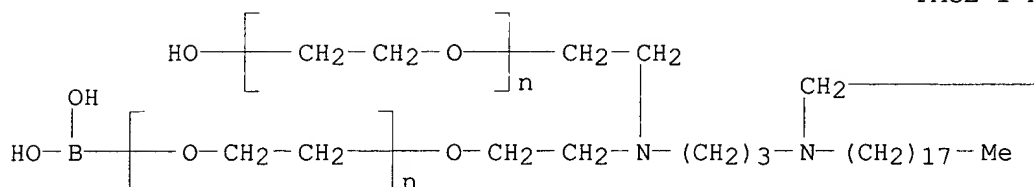
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

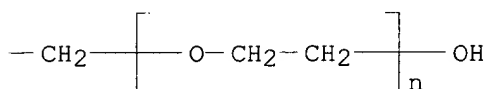
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	JP 07197062	A2	19950801	JP 1993-335792	19931228
OTHER SOURCE(S):	MARPAT 124:121818				
AB	The additives comprise boric acid salts, boric acid esters, and/or boric acid amides of amine compds. R1N(A1O)mH(A2O)nH, NR2R3(A3O)lH, and/or NR4C3H6N[(A4O)pH(A5O)qH](A6O)rH (R1-4 = C8-28 hydrocarbons; A1-6 = C2-4 alkylene; l, m, n, p, q, r = 0-20; m + n = 1-20; p + q + r = 1-20). The additives may contain metallic detergents. The compns. contain base oils mixed with ashless dispersants and extreme-pressure lubricants. The products have good detergency and long life.				
IC	ICM C10M139-00				
	ICS C10M133-08				
ICI	C10N030-04, C10N040-25				
CC	51-8 (Fossil Fuels, Derivatives, and Related Products)				
IT	31017-83-1D, boric acid amide derivs. 36356-75-9D, boric acid amide derivs. 106392-12-5D, reaction products with stearylpropylenediamine, borate salts 172650-76-9 172650-77-0 172650-78-1 172650-79-2 172650-80-5 172650-81-6 172650-82-7 172650-83-8 172650-84-9				
	RL: MOA (Modifier or additive use); USES (Uses)				
	(lubricating oil additives contg. amine borates for diesel engines for detergency and long life)				
IT	172650-84-9				
	RL: MOA (Modifier or additive use); USES (Uses)				
	(lubricating oil additives contg. amine borates for diesel engines for detergency and long life)				
RN	172650-84-9 HCAPLUS				
CN	Poly(oxy-1,2-ethanediyl), .alpha.-borono-.omega.-[2-[(2-hydroxyethyl)[3-[[[2-hydroxyethyl]octadecyl]amino]propyl]amino]ethoxy]-, ether with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (1:2) (9CI) (CA INDEX NAME)				

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PAGE 1-B



L3 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:688056 HCAPLUS

DOCUMENT NUMBER: 123:328796

TITLE: Two dimensional photoinduced electron transfer (PET) fluorescence sensor for saccharides

AUTHOR(S): Sandanayake, K. R. A. Samankumara; James, Tony D.; Shinkai, Seiji

CORPORATE SOURCE: Shinkai Chemirecognics Project, ERATO, Kurume, 830, Japan

SOURCE: Chem. Lett. (1995), (7), 503-4

CODEN: CMLTAG; ISSN: 0366-7022

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The cooperative binding of two boronic acid moieties was used to create a two-dimensional fluorescence sensor for saccharides. The photoinduced electron transfer switching mechanism was used to provide information of saccharide concn. while the excimer emission changes of the pyrene moieties provide the nature of the complex.

CC 80-2 (Organic Analytical Chemistry)

Section cross-reference(s): 9, 22, 25, 33, 73, 74

IT 50-99-7D, Glucose, complexes with boronic acids 57-48-7D, Fructose, complexes with boronic acids 59-23-4D, Galactose, complexes with boronic

acids 107-21-1D, 1,2-Ethanediol, complexes with boronic acids 6038-51-3D, Allose, complexes with boronic acids 156742-45-9D,

complexes

with saccharides 170454-33-8D, complexes with saccharides

170454-34-9D, complexes with saccharides

RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); FORM (Formation, nonpreparative); PROC (Process)

(stability consts. and fluorescence of)

IT 170454-33-8P

RL: ARG (Analytical reagent use); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation);

USES

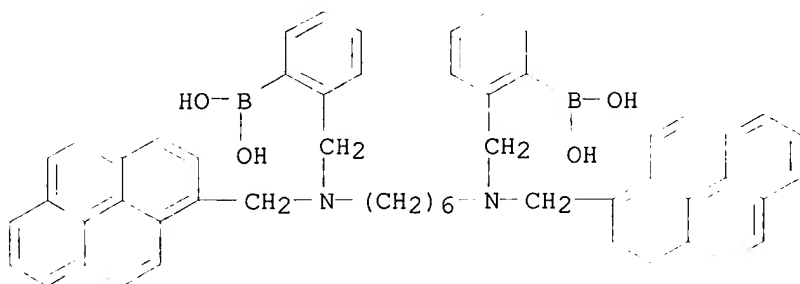
(Uses)

(two-dimensional photoinduced electron transfer (PET) fluorescence sensor for saccharides)

IT 170454-33-8D, complexes with saccharides
 RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); FORM (Formation, nonpreparative); PROC (Process)
 (stability consts. and fluorescence of)

RN 170454-33-8 HCAPLUS

CN Boronic acid, [1,6-hexanediylbis[[[(1-pyrenylmethyl)imino]methylene-2,1-phenylene]]bis- (9CI) (CA INDEX NAME)



RL: ARG (Analytical reagent use); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation);

USES
 (Uses)
 (two-dimensional photoinduced electron transfer (PET) fluorescence sensor for saccharides)

L3 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1993:224354 HCAPLUS

DOCUMENT NUMBER: 118:224354

TITLE: Synthesis and characterization of a novel DTPA-like gadolinium(III) complex: a potential reagent for the determination of glycosylated proteins by water proton

NMR
 relaxation measurements

AUTHOR(S): Aime, Silvio; Botta, Mauro; Dastru, Walter; Fasano, Mauro; Panero, Maurizio; Arnesi, Aldo

CORPORATE SOURCE: Dip. Chim. Inorg., Chim. Fis. Chim. Mater., Univ. Torino, Turin, I-10125, Italy

SOURCE: Inorg. Chem. (1993), 32(10), 2068-71
 CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The synthesis of a DTPA-like ligand, (HO)2B-m-C6H4NHCO(CH2N(CH2COOH)CH2)3CONH-m-C6H4B(OH)2 (H3L) and GdL(H2O) (3) is reported. The measurement of the proton relaxation rate over the proton Larmor frequency range of 0.01-50 MHz of an aq. soln. to this paramagnetic complex suggests that it contains only 1 H2O mol. in its inner coordination sphere, as was previously found for the parent DTPA complex. Competition trials in presence of variable amts. of [Gd-EDTA]- afford a

Kf value of 2.0 .times. 1016. Since the boronic functionalities form stable

QD151.19
 QD1.17

linkages with sin-diol moieties, the interaction of 3 with glycinated albumin leads to the formation of a ternary albumin-3 complex. The large size of this adduct is responsible for a lengthening of the mol. reorientational time τ_R , which in turn results in an increase of H₂O proton relaxation rate (R₁). The obsd. R₁ enhancement then provides a direct evaluation of the extent of glycation of the albumin specimen.

CC 78-7 (Inorganic Chemicals and Reactions)

Section cross-reference(s): 9, 29, 77

IT **146892-94-6P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with gadolinium chloride)

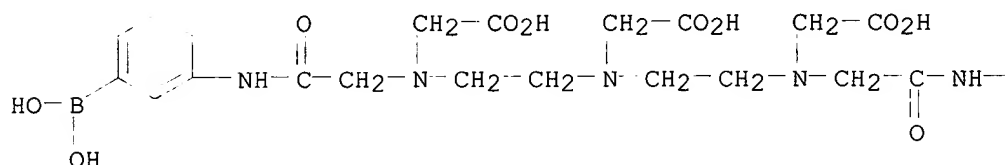
IT **146892-94-6P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with gadolinium chloride)

RN 146892-94-6 HCAPLUS

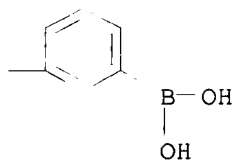
CN Glycine, N,N-bis[2-[[2-[(3-boronophenyl)amino]-2-oxoethyl](carboxymethyl)amino]ethyl]-, tripotassium salt (9CI) (CA INDEX NAME)

PAGE 1-A



● 3 K

PAGE 1-B



=> fil hcaold

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PRE-1967 CHEMICAL ABSTRACTS FILE WITH HOUR-BASED PRICING
FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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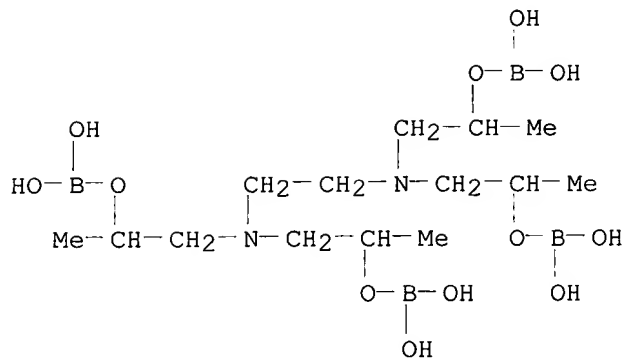
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FILE 'HCAOLD' ENTERED AT 13:25:52 ON 21 JUN 2001

=> d all hitstr 1-2

L4 ANSWER 1 OF 2 HCAOLD COPYRIGHT 2001 ACS
AN CA56:15366c CAOLD
TI diesters of dithiosulfurous acid
AU Wolff, William F.
DT Patent
PATENT NO. KIND DATE

PI US 3015670 1962
IT ~~63938-89-6~~
IT 63938-89-6
RN 63938-89-6 HCAOLD
CN 2-Propanol, 1,1',1'',1'''-(1,2-ethanediyldinitrilo)tetrakis-, ester with boric acid (H3BO3) (1:4) (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 2 HCAOLD COPYRIGHT 2001 ACS
 AN CA56:15365e CAOLD
 TI tetrakis(dihydroxyboroxyalkyl)alkylenediamines
 AU Rudner, Bernard; Moores, M. S.
 PA Koppers Co., Inc.
 DT Patent
 PATENT NO. KIND DATE

 PI US 3000924 1961
 IT 63938-89-6
 IT 63938-89-6
 RN 63938-89-6 HCAOLD
 CN 2-Propanol, 1,1',1'',1'''-(1,2-ethanediylldinitrilo)tetrakis-, ester with
 boric acid (H3BO3) (1:4) (9CI) (CA INDEX NAME)

